

Statement of Considerations

**REQUEST BY GENERAL ELECTRIC COMPANY FOR AN
ADVANCE WAIVER OF DOMESTIC AND FOREIGN RIGHTS IN
SUBJECT INVENTIONS MADE IN THE COURSE OF OR UNDER
PHASE 3 OF DEPARTMENT OF ENERGY COOPERATIVE
AGREEMENT NO. DE-FC21-95MC31176; DOE WAIVER
DOCKET W(A)-95-034 [ORO-612]**

General Electric Company (GE) has made a timely request for an advance waiver to worldwide rights in Subject Inventions made in the course of Department of Energy (DOE) Cooperative Agreement No. DE-FC21-95MC31176. The scope of the work calls for full scale component development tests and final design of advanced gas turbine equipment. The work is being done under the Advance Turbine Systems Program and is sponsored by the Office of Fossil Energy.

GE began working with DOE on the Advance Turbine program under a contract that was to be the first of multiple phases. The first phase involved a feasibility study and the second a design phase. GE requested and was granted an advance waiver for inventions made under phase 2, Contract No. DE-AC21-93MC30246, Waiver No. W(A)-93-031. The area of technology, GE's commercialization ability, general terms and the conditions, and other considerations that applied in phase 2 remain the same for this agreement with the exception of the cost sharing. Since GE is cost sharing over 70% of the costs the contracting officials have made this phase a cooperative agreement, Cooperative Agreement No. DE-FC21-95MC31176. The dollar amount of the Cooperative Agreement is \$169,782,159 with GE cost sharing \$119,789,159 consisting of \$90,678,122 in general program funding support and \$29,104,037 in contributed materials and equipment, for a total of 70.5% of the total Cooperative Agreement amount.

GE has been in the gas turbine business since the late 1940s and has produced over 4500 heavy duty machines and 1200 land-based aeroderivative units. The Power Generation Group and the Aircraft Engine Group, which will oversee this program, employ over 1000 and 4000 engineers, respectively. The Corporate Research and Development facility that serves both of these businesses has a staff of over 1100 technical professionals. Therefore, GE's experience, expertise and technical and business support will contribute substantially to commercialization of the inventions made under the Cooperative Agreement.

GE has a history of research and development leading to commercialization of developed gas turbine systems and has also made a considerable investment in the field of technology. GE has demonstrated financial commitments in the development of turbine technology, first in its investment of over \$75 million in the development of the "F" class of gas turbines introduced in 1990, and second in its present development program for low emission combustion systems for its complete gas turbine product line. It is committing resources previously used in these activities, such as personnel, equipment, and expertise, to develop the gas turbine technology under this Cooperative Agreement.

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The Cooperative Agreement has been executed and is proceeding with the standard DOE long form patent clause. If the requested waiver is approved, a patent rights clause embodying the standard DOE waiver terms and conditions including march-in rights, retention by the government of a license, preference for U.S. industry, and U.S. Competitiveness clauses will be added by a no-cost modification to the Cooperative Agreement. GE has approved the modifications with two deviations. In paragraphs (k)(2) and (k)(3) relating to Background Patents, GE agrees to the language provided that the words "a subject of this Cooperative Agreement" be replaced with "such applications and uses of natural gas and coal gas-fired gas turbines in combined cycle as are evaluated under this Cooperative Agreement" to limit the licensing required to fields of technology covered by the Cooperative Agreement.

The advance patent waiver will also contain a paragraph that limits GE's ability to alienate waived rights. Specifically, GE shall not transfer rights in any invention without prior approval of DOE. Also, should there be a change in ownership of GE, or its Power Generation Group or the Aircraft Engine Group, rights in inventions will be suspended until approval by DOE of the entity obtaining controlling interest having the waiver.

GE agrees that any products embodying any waived invention or produced through the use of any waived invention during the term of a United States patent covering the waived invention will be manufactured substantially in the United States unless GE can show to the satisfaction of the Contracting Officer that it is not commercially feasible to do so.

Granting of the waiver should have little effect on competition since there are several technology options, this being one of many previously or yet-to-be developed in the marketplace, therefore there should not be undue market concentration of GE products.

Grant of the requested waiver should serve as encouragement to other DOE contractors that significant cost sharing will be recognized as an acceptable consideration for granting greater rights in Subject Inventions.

The Cooperative Agreement has been reviewed for compliance with the Energy Policy Act and it has been determined that entering into the Cooperative Agreement is in the best interest of the United States.

In view of the acceptable level of cost sharing by GE and the objectives and considerations set forth in 41 CFR 9-9.109, all of which have been considered, it is recommended that the requested waiver for worldwide rights be granted.



Katherine Lovingood
Senior Patent Attorney

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Based on the foregoing Statement of Considerations and the representations in the attached Waiver Petition, it is determined that the interest of the United States and the general public will best be served by a waiver of U.S. and foreign patent rights, and therefore, the waiver is granted. This waiver shall not apply to a modification or extension of the cost-shared Cooperative Agreement where, through such a modification or extension, the purpose, scope or cost of the Cooperative Agreement has been substantially altered.

CONCURRENCE:




George Rudins
Deputy Assistant Secretary
for Coal Technology, FE-20

Date:

11/3/95

APPROVAL:



Paul A. Gottlieb
Assistant General Counsel
for Technology Transfer and
Intellectual Property

Date:

11-3-95

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WAIVER ACTION ABSTRACT

<u>REQUESTOR</u>	<u>CONTRACT SCOPE OF WORK</u>	<u>RATIONALE FOR DECISION</u>	<u>DISPOSITION</u>
General Electric Co.	Full scale development tests and final design of advance gas turbine equipment	70.5% cost sharing, agreement to manufacture in the U.S., and encouragement of other contractors to cost share and agree to commercialize inventions	Grant Waiver

(o) U.S. Competitiveness

GE agrees that any products embodying any waived invention or produced through the use of any waived invention during the term of a United States patent covering the waived invention will be manufactured substantially in the United States unless GE can show to the satisfaction of the Contracting Officer that it is not commercially feasible to do so.